

COMMONWEALTH of VIRGINIA

Department of Health DIVISION OF SHELLFISH SANITATION

109 Governor Street, Room 614-B Richmond, VA 23219 Ph: 804-864-7487

Fax: 804-864-7481

WHITING AND MEACHIM CREEKS
Growing Area # 030
Middlesex County
Shoreline Sanitary Survey

Date: 30 May 2007

Survey Period: March 23, 2007 – May 17, 2007 Total Number of Properties Surveyed: 682

Surveyed By: D.R. Beuchelt

SECTION A: GENERAL

This survey area begins at Reference Point 31 at Bailey Point and ends at Reference Point 32 at Greys Point Bridge. Included in this area is the Rappahannock River Shoreline between these two reference points, Whiting Creek, Meachim Creek and all of their tributaries. The Division of Shellfish Sanitation has drawn the designated boundary.

The topography of the area surveyed begins with an elevation of 10' or less along the Rappahannock River shoreline to a maximum of 98' along the boundary line at the intersection Route 3 and Route 33 at Harmony Village.

The Robert O. Norris Bridge, located at Greys Point, allows passage from Middlesex County (part of the Middle Peninsula) to Lancaster County (part of the Northern Neck) via Route 3. Routes 3 and 33 serve as corridors for commuting, transporting industrial goods and tourism between these areas. The Rappahannock River serves as a corridor for sea vessels transporting goods in and out of the area and serves recreational boats as well. This particular year, *The Sultana* will sail this waterway in August recreating Capt. John Smith's 1608 voyage as part of the Jamestown Anniversary Commemoration Celebration.

Located in Topping at Hummel Field is the Middlesex County Airport which provides commuters with a 2261'x45' runway for use by small aircraft along with fuel, a terminal and hangars.

According to VELMA (Virginia's Electronic Labor Market Access), the population of Middlesex increased by 13.5 % since 1994 and was estimated at 10,442 in 2004. The total civilian labor force for Middlesex in March 2007 was 5,043 of which 4,877 were employed and 166 unemployed leaving an unemployment rate of 3.3%. The major industry group in Middlesex is Construction with 90 establishments and 528 employees followed by Retail Trade with 54 establishments and 484 employees. Health Care and Social Assistance with 20 establishments employs the highest number of employees at 542.

According to the Middlesex Community Profile prepared by the Virginia Employment Commission, 2097 people live and work in the area, while 2,136 commute outside of the area



and 1,027 commute in. Two hundred and eighty-one residents use the bridge to commute to Lancaster and 154 workers from Lancaster and Northumberland use the bridge to commute to Middlesex.

During this survey period, meteorological data indicated that 6.77' of precipitation was recorded. A monthly breakdown follows:

March 23-31 0.00" April 1-30 5.14" May 1-17 1.63"

The area has experienced several major storms since the 2001 shoreline survey. Three of the largest storms producing heavy winds, excessive precipitation and flooding hit the area in September 2003 from Hurricane Isabel with 2.03" of precipitation, in August 2004 from Tropical Depression Gaston recording 1.37" of precipitation and in September 2006 from Tropical Depression Ernesto recording 8.81" of precipitation. The impact of this weather resulted in heavy erosion along the shoreline banks of the Rappahannock River producing destruction to homes and docks. One property owner stated that the dock had been 'replaced' five times since 1992.

Another concern is Channel Erosion and Gully Erosion that is resulting from these heavy storm systems. Two properties were found to have severe erosion occurring near the subsurface drainfields. These properties will be surveyed occasionally to assure that leaching from the sewage disposal systems has not occurred.

Additional information about Middlesex County can be found on the county's website at: www.co.middlesex.va.us., including information about the Department of Planning and Community Development and adopted ordinances. The Erosion and Sediment Ordinance became effective July 20, 1994 as authorized by the Code of Virginia, Title 10.0, Chapter 5, Article 4 (10.1-560 et seq.). In 2001 an updated version of the 1994 Comprehensive Plan was introduced. A Subdivision Ordinance was reprinted with revisions on February 22, 2006 and a Floodplain Ordinance was reprinted on February 20, 2007. The following quote has been copied from the Middlesex County Virginia Floodplain Ordinance:

On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding by placement outside of designated flood zones. If placement outside of flood zones is not possible, the system shall include the use of top-seamed tanks and/or sealed septic and pump chamber tanks. All tanks subject to floatation shall be adequately anchored to prevent floatation.

In the January 11, 2007 edition of the Southside Sentinel an article written by Tom Chillemi states that Middlesex County has initiated a program requiring private septic systems to be pumped out at least every five years. The Middlesex Board of Supervisors has established this program to comply with the December 12, 2005 Chesapeake Bay Local Assistance Board mandate which applies to systems located in the Chesapeake Bay Preservation District and installed after 1993.

Older establishments that have been damaged by storms, or have been found unusable, have been demolished and replaced. New developments in this area have been proposed, some already starting construction. Heron Point has started construction.

In February 2005, the Southside Sentinel reported that a proposal had been initiated to develop Rosegill Plantation, one of the oldest plantations in America. Since that time several articles have appeared in the Sentinel reporting that 521 acres of the 848 acre plantation would be rezoned. The proposal is to construct 700 units over an eleven year period with 124 homes on the first parcel of 106 acres completed by Spring 2008. According to Matt Higgins, Middlesex

Planning Director, the plans are still in design stage. He also stated that the subdivision will not be serviced by the Sewage Treatment Plant, but serviced by a drip irrigation sewage system.

Found during this survey were 2 on-site deficiencies, 11 properties marked as potential pollution deficiencies, 1 industrial site, 7 boating activity sites and 6 sites marked for animal pollution.

Two Sewage Treatment Facilities are located in this area. One treatment facility serves Christ Church School, the other serves The Mizpah Health Care Center. Interest in upgrading to Ultraviolet Light Sterilization was expressed by Mr. J.D. Davis, Wastewater Treatment and Waterworks Operator of the Health Care Center. Mr. Davis hopes that monies will become available to make this change as he would like to get away from disinfection by liquid chlorine.

Sewage Lagoons located at the previously named "Barnhardt Duck Farm" are no longer in use and have grown into wetlands according to the Department of Environmental Quality. At the time of this survey this area did not require any special attention.

There were no Solid Waste sites located in this area, however, dumpsters to collect trash are located at Grey's Point camp and are part of the campground amenities.

During this shoreline survey, the Tidewater Oyster Growers Association (TOGA) held the eleventh Annual Oyster Fair on May 5 at Christchurch school. TOGA is a group of people interested in growing oysters for fun, for delicious food, and to help restore the health of the Chesapeake Bay.

An article in the April 15, 2007 edition of the Richmond Times dispatch reported that Dominion Resources has donated \$45,000 to the Urbanna Oyster Festival Foundation. This money will help finance a film to document the lives of Middle Peninsula and Northern Neck watermen and will help support a marine science class at St. Clare Walker Middle School. The school is located adjacent to the boundary line of this survey.

Copies for Bacteriological, Hydrographic and Shellfish Closure data are available at the area office for review. Copies of the current condemnation notices and maps are available via the internet at http://www.vdh.virginia.gov/shellfish/.

This report lists only those properties that have a sanitary deficiency or have other environmental significance. "*DIRECT*" indicates that the significant activity or deficiency has a direct impact on shellfish waters. Individual field forms with full information on properties listed in this report are on file in the Richmond office of the *Division of Shellfish Sanitation* and are available for reference until superseded by a subsequent survey of the area. Data in the report is also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs.

SECTION B: SEWAGE POLLUTION SOURCES

SEWAGE TREATMENT FACILITIES

DIRECT – Christchurch School STF, located on Hibble Road, c/o Dennis Gunn, Director of Operations, 49 Seahorse Lane, Christchurch 23031. VPDES Permit # VA0024066, Discharge # 001 to an unnamed tributary of the Rappahannock River. Capacity is 40,000 GPD. Currently using 8000–9000 GPD. Liquid Chlorine is used for disinfection.

11. **DIRECT**- Mizpah Health Care Center STF, located on Mizpah Road, c/o J.D. Davis, 74 Mizpah Rd., Locust Hill 23092. VPDES Permit No. 0063029. Discharge to an unnamed tributary of the Rappahannock River. Flow was not ascertained. Previous report states the Design Flow as 0.02 MGD. Chlorax is used for disinfection. Mr. Davis states that he would like to obtain funding to upgrade to a Ultravioloet unit for disinfection. Solids are pumped and hauled by Septage Hauler.

ON-SITE DEFICIENCIES

- 4. CONTRIBUTES POLLUTION Location: 550 Hibble Road, Christchurch 23031.

 Dwelling 1 ½ story white asbestos shingles with light green roof shingles. No Contact.

 Effluent to ground surface. Sanitary Notice issued 3/26/07 to Field #35. Tax Map # 27
 162.
- 19. NO FACILITIES Location: 1252 Kates Neck Road, Topping 23169. Dwelling 1 ½ story small house. No Contact. Sanitary facility unknown. County records state the property does not have a septic system installed. Sanitary Notice issued 4/17/07 to Field # 342. Tax Map # 29 21 D.

POTENTIAL POLLUTION

- 1. Location: 1098 Crafton Quarter Road, Saluda 23149. Dwelling 1 story white with green shutters and metal roof. No Contact. A 1" black pipe exits the rear of the house. No signs of discharge.
- 5. Location: 4411 General Puller Highway, Saluda 23149. Dwelling Double-wide with light gray siding with white trim and dark gray shingles. No Contact. Grass around the septic tank is tall and dark. No signs of effluent or odor.
- 7. Location: 81 Riverwatch Lane, Saluda 23149. Dwelling 1 story white with green shutters and metal roof. No Contact. A metal pipe of unknown origin exits the side of the house. No signs of discharge.
- 13. Location: 71 Whiting Cove Road, Locust Hill 23092. Dwelling 1 story with blue siding and black shingles. No Contact. Area over drainfield has tall dark grass. No signs of malfunction.
- 14. Location: 88 No Head Bottom Road, Locust Hill 23092. Dwelling 1 ½ story white with metal roof. No Contact. Property is covered with old cars, trucks, junk and debris.
- 15. Location: 6823 General Puller Highway, Locust Hill 23092. Dwelling older white mobile home. 2 persons. In rear of house is a covered washing machine. The occupant says the washer is not being used.
- 16. Location: 7383 General Puller Highway, Locust Hill 23092. Dwelling beige mobile home. 1 person. Area over septic system has tall grass. No signs of effluent or odor.
- 17. Location: 149 Greys Point Road, Topping 23169. Dwelling 1½ story cream-colored siding with brown shingles and brown trim. 1 person. Previous fall, during heavy rainfall, the septic tank filled up and had to be pumped. No signs of malfunction during time of survey.

- 21. Location: 1590 Locust Grove Road, Topping 23160. Dwelling older mobile home white with dark shutters. No Contact. A black pipe, origin unknown, exits the rear of a shed. No signs of discharge.
- 24. Location: 1535 Greys Point Road, Topping 23160. Dwelling 2 story white siding with metal roof. 1 person. Owner states when heavy precipitation occurs, wastewater is slow draining from the bathroom. No evidence of malfunction.
- 27. Location: 687 Long Point Road, Topping 23160. Dwelling 1 ½ story tan shingles with white trim. No Contact. 1" pvc pipe of unknown origin exits the garage. No signs of discharge.

SECTION C: NON-SEWAGE WASTE SITES

INDUSTRIAL WASTE

28. Location: 310 Plainview Road, Topping 23160. Middlesex County Airport, c/o Charles M. Culley, County Administrator, PO Box 428, Saluda 23149. Public Airfield serving small aircraft. 3 employees. Located on premises was one 12,000 gallon aviation fuel tank with 3' concrete berm and surrounded by a 8' chain link fence.

SOLID WASTE DUMPSITES

-None-

SECTION D: BOATING ACTIVITY

MARINAS

29. Grey's Point Camp, c/o Walt Hurley, Owner, PO Box 178, Urbanna 23175. RV Resort and Private Marina used by guests of the campground. Available on-site are 204 seasonal slips/moorings, 230 dry storage spaces, electricity, water, solid waste containers, restroom, dump station, and pump out facilities. Facility # 548.

OTHER PLACES WHERE BOATS ARE MOORED

3. Christchurch School Sailing Pavilion, c/o Dennis Gunn, Director of Operations, 49 Seahorse Lane, Christchurch 23031. Pavilion and private landing for sailing school. A request went to VMRC in April 2007 for a proposed 8'x325' long pier, a 16'x8' testing platform and with two boat lifts.

UNDER SURVEILLANCE

- 6. Windward Watch, end of Windward Watch Lane, c/o Gibson Wright, 8100 Three Chopt Road, Suite 113, Richmond 23229. No Contact. This area has experienced storm damage. The ramp is gone and the dock is under repair. At the time of the survey, part of the dock could be used for loading/unloading. Facility # 1488.
- 12. Whitings Creek Public Landing, end of Marsh Pungo Road, (Route 634). c/o Middlesex County, c/o Charles M. Culley, County Administrator, P.O. Box 428, Saluda 23149. Available on-site is a loading/unloading dock and a floating dock. Facility # 1460.

- 22. Moore Landing, end of Moore Drive, c/o John Cunningham, Manager, PO Box 351, Topping 23169. Private dock and ramp for residents. Available on-site are 5 slips, ramp, electric, water and solid waste cans.
- 23. Peter Bleeker, 1444 Locust Grove Road, Topping 23169. Private dock. No Contact. Available on-site is 4 sips/moorings, electric, water and solid waste cans. Facility # 1463.
- 26. Hideaway Point Inc., adjacent to 417 Hideaway Point Road, c/o Warren Carter, 2211 Craven Ln. Richmond 23228. Available on-site is a dock and ramp for use by residents. Facility # 1448.

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 8. Location: 4641 General Puller Highway, Saluda 23149. Dwelling brick rancher with black shingles. No Contact. Unable to access property. Visible from highway were 3 horses and 3 cows. Manure is left on ground.
- 9. Location: 4853 General Puller Highway, Saluda 23149. Dwelling 1 story white with green shutters and metal roof. No Contact. Present at time of survey were 9 bison. Manure is left on ground surface.
- 10. Location: 387 Brandon Point Road, Locust Hill 23092. Dwelling 1 story brick with white trim and white shutters. 1 person. Present at time of survey were 8 goats. Pasture is well maintained. Manure is hauled off.
- 18. Location: 779 Kates Neck Road, Topping 23169. Gone to the Dogs Kennel and Care, 3 persons. Present at time of survey were 12 dogs in kennels and 8 goats in pen. Manure is hauled off to dump.
- 20. Location: 548 Kates Neck Road, Topping 23169. Dwelling 1 ½ story white with metal roof. 2 persons. Present at time of survey were 5 horses. Owner practices Organic Farming and uses the manure as fertilizer.
- 25. Location: 1843 Greys Point Road, Topping 23169. Dwelling 1 story white with green shutters and light gray shingles. 2 persons. Present at time of survey were 7 goats. Manure was left on ground surface.

SUMMARY

Area # 030 Whiting and Meachim Creeks 30 May 2007

SECTION B: SEWAGE POLLUTION SOURCES

- 1. SEWAGE TREATMENT FACILITIES
 - 2 DIRECT # 2, 11
 - 0 INDIRECT None
 - 2 B.1.TOTAL
- **2. ON-SITE SEWAGE DEFICIENCIES** Correction of deficiencies in this section is the responsibility of the local health department.
 - 0 CONTRIBUTES POLLUTION, DIRECT None
 - 1 CONTRIBUTES POLLUTION, INDIRECT # 35
 - 0 CP (Kitchen or Laundry Wastes), DIRECT None
 - 0 CP (Kitchen or Laundry Wastes), INDIRECT None
 - 0 NO FACILITIES, DIRECT None
 - 1 NO FACILITIES, INDIRECT # 19
 - 2 B.2. TOTAL
- **3. POTENTIAL POLLUTION** Periodic surveillance of these properties will be maintained to determine any status change.
 - 11 POTENTIAL POLLUTION # 1, 5, 7, 13, 14, 15, 16, 17, 21, 24, 27

SECTION C: NON-SEWAGE WASTE SITES

- 1. INDUSTRIAL WASTE SITES
 - 0 DIRECT None
 - 1 INDIRECT # 28
 - 1 C.1. TOTAL
- 2. SOLID WASTE SITES
 - 0 DIRECT None
 - 0 INDIRECT None
 - 0 C.2. TOTAL

SECTION D: BOATING ACTIVITY

- 1 MARINAS # 29
- 1 OTHER PLACES WHERE BOATS ARE MOORED #3
- 5 UNDER SURVEILLANCE # 6, 12, 22, 23, 26
- 7- D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 0 DIRECT None
- <u>6</u> INDIRECT # 8, 9, 10, 18, 20, 25
- 6 E. TOTAL

